

REMARKS

Claims 1-16 are all the claims pending in the application.

Claims 2, 4, 6 and 8 are rejected under 35 U.S.C. 112, first paragraph.

Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph as being indefinite.

Claims 1, 3, 5 and 7 are rejected under 35 U.S.C. 103(a) as being unpatenable over Hess et al. (U.S. Publication No. 2002/0094533) in view of Ogawa (U.S. Patent No. 6,492,119).

Claims 2, 4, 6 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hess et al. (U.S. Publication No. 2002/000094533) in view of Ogawa (U.S. Patent No. 6,492,119), as applied to claim 1, further in view of Ogura (U.S. Publication No. 2002/0061534).

The Applicants traverse the rejections and request reconsideration.

Objections to the claims

The Applicants include status identifiers for Claims 9-16 as required.

Claim Rejections Under 35 U.S.C. § 112, first paragraph

The Applicants respectfully submit that the amendments that were made to claim 2 are supported by the present Specification. Specifically, the support can be found in Fig. 2 and the accompanying description. In the exemplary embodiment shown on Fig. 2, the first and the second layers of claim 2 read on items 4a and 4b respectively which are located in the adsorptive region 4. The Specification clearly notes that the signal absorbing layer 5 passes through an underside area 6 that is located under the base plate. (see ll. 19-21, p. 18 of the Specification). Further, it is asserted that at the underside area 6 located under the base plate 2, the layer 4a and the layer 4b are connected with corresponding layers in the adjacent adsorptive region. (see l. 23, p. 18 - l. 2, p.-19 of the Specification). Importantly, the Specification asserts that the underside

area 6 that is located under the base plate 3 is constituted of the layer 4a, layer 4b and the signal absorbing layer 5 which have been compressed by being pressed together against the bottom of the base plate 2.

Therefore in the region 5, the signal absorbing layer is below the first and the second layers as required by claim 2. Region 6 is outside of the adsorptive regions as required by claim 2. In region 6, the first layer, the second layer and the signal absorbing layers are present below the base plate. In other words, in region 6, under the base plate 2 layers 4a and 4b are crushed and present between the base plate and the signal absorbing layer 5.

Claims Rejections under section 112, second paragraph

Regarding claim 1, the Applicants respectfully submit that that a skilled artisan, reading the claims in light of the Specification and the figures, would know that the adsorptive region is a “region” which is a location in space. Within the regions 4, as shown in the exemplary embodiment of Fig. 2, there are two layers 4a and 4b. Thus it is clear that there is no additional second material in addition to the porous material constituting the first and the second layers.

Regarding claim 2, the above explanation in relation to the section 112, first paragraph, should clarify that layers 4a and 4b are crushed and are located in between the base plate 2 and the signal absorbing layer in region 6. This is further clear when the process of making the units are described in relation to Fig. 3 in pp. 32-33 of the Specification. Notably, the two layers are placed below the base plate and are crushed with rollers as shown in Fig. 3a. This would push the layers into the holes 3, thus generating the adsorptive regions 4. In region 6, where there are no holes, the layers get crushed and are placed in between the base plate 2 and the signal absorbing layer.

The Applicants respectfully amend the claims to overcome the rejections related to the use of the word “constituted.”

Claim Rejections Under 35 U.S.C. § 103

Rejection of claims 1,3,5,7, based on Hess and Ogawa

The Applicants respectfully submit that an aspect of the invention lies in that the layer of the absorptive regions has pores having a comparatively large mean pore diameter. In such a case it has a small specific surface area, and is capable of suppressing signal (noise) propagating between the adjacent holes. This is because the light emitting substances contained in the layer are reduced.

The combined teachings of Hess and Ogawa do not disclose these advantageous combination of structural features.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *MPEP 2142 citing In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

The Applicants respectfully submit that the patent office has not satisfied the burden of establishing *prima facie* obviousness at least because it has not satisfied the “all limitations” prong of the three prong test for obviousness. Specifically, the patent has not shown that the combined teachings of Hess and Ogawa suggest a porous adsorptive material which are filled in a plurality of holes in a substrate to form a plurality of adsorptive regions such that the adsorptive regions comprise a first layer and a second layer with a mean pore diameter of the first layer being larger than a mean pore diameter of the second layer.

The Applicants respectfully submit that only with such a combination of features will the advantageous effect of reducing noise be achievable.

Since the “all limitations” prong is not satisfied, the other two prongs of the three prong test for obviousness must fail. Specifically, there is no motivation to combine the teachings of Hess and Ogawa to make the present invention with a reasonable expectation of success.

Rejections of claims 2, 4, 6 and 8 under 35 U.S.C. 103(a) as being unpatentable over Hess et al. in view of Ogawa, as applied to claim 1, further in view of Ogura

The appears to have ignored some limitations recited in claim 2. Importantly, the combined teachings of Hess, Ogawa and Ogura do not suggest that the first and the second layer of one of said adsorptive regions is connected with a first and a second layer corresponding to an adjacent one of said adsorptive regions at one of surfaces of the base plate. In fact in none of the three cited references Hess, Ogawa and Ogura, there is such a connection. In all of these three references, the adsorptive material is confined to the holes.

Further, claim 2 requires a signal absorbing layer for absorbing a signal positioned below the base plate. Still further, the first layer, the second layer and the signal absorbing layer are required to be present below the base plate outside of the adsorptive regions. Moreover, the signal absorbing layer is required to be present below the first and the second layer in the adsorptive regions. These limitations are described in detail in the above section related to the section 112 rejections.

The combined teachings of Hess, Ogawa and Ogura do not suggest the above noted features. The refers to [110] of Ogura. However in that passage it is merely noted that light absorbing materials can be added to the substrate 11 of Ogura. However, there is no suggestion for a signal absorbing layer that is below the first and the second layer in the adsorptive region. Importantly there is no suggestion for a first layer, a second layer and a signal absorbing layer to be present below the base plate outside the adsorptive region.

The Applicants respectfully submit that the Patent Office has not satisfied the burden of establishing *prima facie* obviousness of claim 2 at least because it has not satisfied the “all limitations” prong of the three prong test for obviousness. Specifically, the Patent Office has not shown that the combined teachings of Hess, Ogawa and Ogura suggests the present invention as a whole including the above noted features related to the signal absorbing layer.

Since the “all limitations” prong is not satisfied, the other two prongs of the three prong test for obviousness must fail. Specifically, there is no motivation to combine the teachings of Hess, Ogawa and Ogura to make the present invention with a reasonable expectation of success.

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Patent Application No. 10/800,676

Attorney Docket No. Q80045

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

Chid S. Iyer

Chid S. Iyer
Registration No. 43,355

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE
23373
CUSTOMER NUMBER

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